

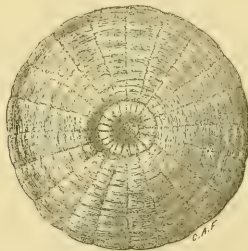
- Fig. 4. A compound plate close to the radial plate, from within. Magnified.  
*a.* A similar plate, lower down, seen on the outside. Magnified.
5. *Echinothrix Desori*, Agass., sp. A compound plate, four or five from the peristome; *x'* is the line of the auricule. Magnified.
6. The tenth compound plate from the peristome. Magnified. *a.* The same, from within.
7. A part of ambulacrum No. 1, seen from within. There are four compound plates and a part of a fifth. Magnified.
8. Some ambulacral plates near the peristome. Magnified.
9. *Astropyga radiata*, Gray. A compound plate (Plate C. of fig. 10) made up of two triplets, after benzole. Magnified.
10. Part of an ambulacrum, plates A, B, C, seen from within, showing the arrangement of the triplets and the circular depressions which correspond with the bases of the tubercles on the outside of the test. Magnified.
11. *Micropyga tuberculata*, Agass. Three compound triplet plates of an ambulacrum above the ambitus. External view. Magnified.

All the figures are slightly diagrammatic.

Description of a new Species of Minyad (*Minyas torpedo*) from North-west Australia. By Professor F. JEFFREY BELL, M.A., Sec. R.M.S. (Communicated by Dr. GÜNTHER, F.R.S., F.L.S.)

[Read 16th April, 1885.]

THE Trustees of the British Museum have lately acquired, by purchase from Capt. Beckett, who has been sailing among the islands which lie to the north-west of Australia, an interesting example of this rare and little-known group. So little is known



Upper surface of *Minyas torpedo*, n. sp.  $\times 2$ .

with regard to the Minyadidæ—the ‘Challenger’ even collecting but few specimens—that a short communication, though based on but a single specimen, may be of interest to the Society.

*Description of the Specimen.*

*External Form.*—The body is rounded, flattened above; marked by twenty grooves which extend from near the apex to the edges of the oral disk; they are fainter near the disk than elsewhere in the wall of the body. The integument between each groove is marked by transverse lines, which do not always extend from groove to groove, and so present a gyriform rather than a sulcate appearance. The apex of the air-chamber is exactly at the aboral pole, and though the body-walls are strongly contracted it is quite apparent; the circular sphincter which surrounds it is marked off by a circular groove from the body-wall, and has an extraordinarily close resemblance to the periproct of a regular echinid.

*Colour* greenish brown.

*Measurements.*—Diameter 15, height 10, diameter of oral disk 4·2, diameter of orifice of air-chamber 1·5, diameter of circular sphincter 4 millim.

*Mouth* deeply withdrawn.

*Tentacles.*—Numerous, short, simple; no perforation to be detected at their tip; apparently bicyclic, but the appearance may be due only to crowding.

*Mesenterial Septa* twenty; corresponding to the grooves of the wall.

*Air-chamber* spacious, not communicating with the gastric cavity or its annexes; not hollow, but containing a body of gelatinous appearance in spirit, which is found under the microscope to be formed of fine fibres of connective substance.

*Zoological Affinities of the Specimen.*

The latest definition of the group to which the specimen belongs is that of Dr. Andres; but as he merely refers to the habit of swimming freely on the surface, we must go back to that of Milne-Edwards and Haime, who group together all such Actinidæ as have the pedal disk purse-shaped under the head of the Minyadinæ; these may have the tentacles smooth or composite, and the former may have the integument verrucose or smooth. It is in the last division that the specimen now under study will have to be placed. The only genus now in the division is that of *Plotactis*, which is thus defined by its authors (Milne-Edwards and Haime):—"Tentacules simples et allongés; corps

rugueux, mais sans tubercules verruciformes." I see no reason for not placing the new specimen in this genus; but I may suggest that as *Minyas* differs only from *Plotactis* by the presence of verrucæ, it would be better to unite the genera, and to use, of course, the old and well-known term of *Minyas*. The genus *Oceanactis*, instituted by Moseley\*, has one row of costal tubercles, and so far would be intermediate between *Minyas* and *Plotactis*; it is distinguished, however, by the connection between the air-chamber and the cœlenteric cavity. *Nautactis* is distinguished by its composite tentacles.

The recognition of the two genera *Minyas* and *Nautactis*, and the grouping under them of most of the species now known, appears to be a wiser plan, and one that is more in accordance with the habit of zoological students than that which has unfortunately been taken by Dr. Andres†, who has instituted four new genera to take the place of those already known. This is not the place, nor is mine the wish, to criticise Dr. Andres's work; but I cannot but express regret at what he has done.

The specimen now under consideration may be called *Minyas torpedo*.

To the morphologist the point of greatest interest with regard to the species is that it makes yet another example of the exceptions to the rule that the Actiniaria in their adult state present a hexamerous arrangement of their parts.

P.S.—Since the above was communicated to the Society, Prof. Stewart has shown me a specimen from New Zealand which he has discovered in the stores of the Museum of the Royal College of Surgeons. It is hardly in a condition for description; but I find in it a confirmation of the view that *Minyas* and *Plotactis* are not to be distinguished generically.

\* Trans. Linn. Soc. (2) i. (1877) p. 296.

† Die Actinien. 'Fauna u. Flora des Golfes von Neapel,' ix. pp. 349-355. Dr. Andres has omitted to notice that Mr. Moseley's figure of *Oceanactis rhododactyla* is expressly said to be "twice the natural size," or he would not have said "Dimensioni non date."